SCP-P5-266
Switch Control Processor

Release Notes
Software Version 6.0.x

MANU0379-01, Revision A
February 28, 1999

Legal Notices

Trademark Notices

Table of Contents

1.0 General Description of Release

This document highlights the features and operational concerns of the SCP-P5-266 Pentium-based switch control processor (SCP).

2.0 System Requirements

The following lists the system requirements for the 266 MHz, Pentium-based SCP:

- The SCP-P5-266 is supported by the *ForeRunner*® *ASX*™-1200 and *TNX*™-1100 ATM Switches.
- The *ForeThought* 6.0 or greater software installed on the SCP-P5-266 includes support for the Pentium-based SCP hardware.

Any attempt to run a version of *ForeThought*® software that is earlier than *ForeThought* 6.0.x or an attempt to run any non Pentium-based tarfile of *ForeThought* software on a Pentium-based SCP will result in a failed software upgrade.

3.0 Features

The following is a list of the features available for the SCP-P5-266 switch control processor:

- 266 MHz Pentium processor with MMX technology
- 66MHz local bus
- 64MB DRAM
- 16MB of FLASH

4.0 Special Information

4.1 SCP-P5-266 Switch Control Processor Installation

You must back up the configuration database (CDB) on the existing SCP before installing the P266 into your switch. Once the SCP has been installed, you can restore the saved CDB. Use the following procedure to back up the CDB before removing and replacing an SCP:

CAUTION

Failure to backup and restore your CDB will result in lost configuration data.

Backing Up the Configuration Database

If you have configured the transfer protocol to be FTP using **`conf system protocol`**, you only need to enter **`oper cdb backup`** to perform the CDB backup. After entering this command, you are prompted for the remote userid and password of the remote host to which you are backing up the file.

If the transfer protocol is configured to be TFTP (default) using **`conf system protocol`**, the remote host to which the file will be backed up must be running the TFTP daemon or server. If you are unsure of how to run the daemon or server, see the ATM Switch Installation and Maintenance Manual for your switch.

If you are using TFTP to backup the CDB, you must first create an empty file in the `/tftpboot` directory on the remote host to receive the CDB. Use the **`touch`** UNIX command to create the file. Then, use the **`chmod`** command to change the permissions of that file so that it will let the switch write the backup CDB to that file.

Perform the following steps to back up your CDB:

1. Telnet to your remote host and log in.
2. Enter the following UNIX commands in sequence on the host:

```
cd  /tftpboot
touch <backup file name>
chmod 777 <backup file name>
```

3. Exit from the telnet session.
4. Telnet to the switch and log into the ATM Management Interface (AMI).
5. Enter the following command:

```
oper cdb backup <host>:/tftpboot/<backup file name>
```

You should receive the following message:

```
CDB backup was successful
```

Your backup file now resides in the file on the host you specified.

Dual SCP Upgrade Considerations

When using dual SCP configuration in an *ASX*-1200 or *TNX*-1100, you must either use two i960-based HA SCPs, two P5 SCPs, or two P266 SCPs per switch fabric. Do not use one of each.

When upgrading from an HA or P5 SCP to the P266 SCP, you must remove both HAs or P5 SCPs before installing a P266 SCP. Failure to do so will cause operational problems.

Removing an SCP

The following procedure explains how to remove an SCP from a switch fabric.

WARNING!

It is highly recommended that you use a grounding strap when handling the SCP or any other switch component. Failure to use a grounding strap may void your warranty.

Do not attempt to remove or replace an SCP without first removing all connections to the SCP (i.e., serial or Ethernet connections).

The Pentium-based SCPs are hot-swappable ONLY if replacing the SCP with the same type (P5 to P5 or P266 to P266).

1. Remove all connections to the SCP.
2. Loosen the two captive fasteners on either edge of the SCP using a straight screwdriver.
3. Carefully remove the SCP from the switch fabric using the two captive fasteners (Figure 1).

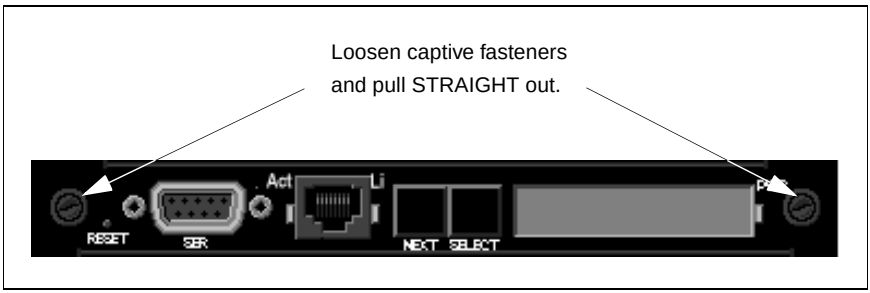

Figure 1 - Removal of an SCP

4. Set the old SCP aside.

Installing an SCP

The following procedure explains how to install the P266 into a switch fabric.

CAUTION

Take care to properly align the SCP in the card guides in the following step.

1. Insert the new SCP into the switch fabric by sliding it into the card guides.
2. Push firmly on the edges and Ethernet connector to seat the SCP in the fabric so that its faceplate is flush with the front of the switch.

WARNING!

Do not press on the LED display when pushing the SCP into the fabric. The display may crack if pressed.

3. Re-tighten the captive fasteners with a straight screwdriver to ensure the SCP is secure.
4. Re-install all connections to the SCP.

If the SCP was inserted properly, the SCP will run the DRAM test. If it does not run the DRAM test, try to install the SCP again. If the problem persists, contact FORE Systems' Technical Assistance Center (TAC) using one of the four methods described in Section 5 of this document.

Restoring the Database

To restore the CDB, you must connect a terminal to the SCP's serial port and start an AMI session. After logging in, you must configure the appropriate interface(s) that will allow you to connect to the remote host to which you backed up the CDB. For more information on configuring interfaces on the switch, see the ATM Switch Installation and Maintenance Manual for your switch.

Once you have saved the CDB, removed and replaced an SCP, and have configured the proper interfaces to allow a connection to the remote host, enter the following parameters to restore the CDB:

operation cdb restore *<host>:<backup file name>*

You will be prompted to verify this command, because the switch will be rebooted once the CDB has been restored. Type y and press **<ENTER>** at the prompt.

Once the switch reboots, the PVCs will be re-established provided that none of the network modules were replaced after the SCP was removed, and provided that all of these steps have been performed properly.

If you have any questions about the above procedures, see Section 5 of these Release Notes for information about contacting FORE Systems' TAC.

4.2 CPU Display

The AMI command **oper env cpu** lets you display information about the CPU. If a 266 MHz Pentium-based SCP is installed, P266 is displayed in the Type field as follows:

```
myswitch::> oper env cpu
CPU   Type   CpuStep State    DRAMSize   FlashSize  BoardRev PromRev
1X     p266      67   normal   64.0M      16.0M         A     1.0
```

5.0 Contacting Technical Support

In the U.S.A., customers can reach FORE Systems' Technical Assistance Center (TAC) using any one of the following methods:

1. Select the "Support" link from FORE's World Wide Web page:

   http://www.fore.com/

2. Send questions, via e-mail, to:

   support@fore.com

3. Telephone questions to "support" at:

   800-671-FORE (3673) or **724-742-6999**

4. FAX questions to "support" at:

   724-742-7900

Technical support for customers outside the United States should be handled through the local distributor or via telephone at the following number:

+1 724-742-6999

No matter which method is used to reach FORE Support, customers should be ready to provide the following:

- A support contract ID number
- The serial number of each product in question
- All relevant information describing the problem or question